

COMPARISON OF I-123 THYROID UPTAKE PHANTOM VALUES: GAMMA CAMERA VERSUS UPTAKE PROBE

Sarah Swann (Monica Clifft), Indiana University School of Medicine, Indiana University–Purdue University Indianapolis, Indianapolis, Indiana 46202

The purpose of this study was to investigate whether gamma cameras and uptake probes give comparable uptake results using ^{123}I capsules.

Methods: During a month-long period, five standard ^{123}I thyroid dose capsules (156-163 μCi) were placed into a neck phantom, and positioned 10 centimeters away from the uptake probes and pinhole collimators attached to two gamma cameras. Each capsule was counted sixty seconds in three trials per capsule, along with a sixty second background count. The counts measured by both uptake probes and gamma cameras were compared.

Results: Comparison between the gamma camera uptake values and the probe system uptake values were done. The Argus gamma camera had higher counts than the Transcam 80% of the time. The probe systems had higher counts than the gamma cameras 100% of the time. *Conclusion:* Probe A and Probe B had significant higher counts than the Transcam and the Argus camera.